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Idaho Conservation League

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Salmon-Cobalt Ranger District
Attn: Jay Winfield, District Ranger
Salmon-Cobalt Ranger District
311 McPherson Street South
Salmon, Idaho, 83467

comments-intermtn-salmon-challis-salmon-cobalt@fs.fed.us

March 17, 2014

Re: Panther (Big) Creek Hot Springs Geothermal Leasing Project

Dear Jay,

Thank you for the opportunity to comment on the Panther (Big) Creek Hot Springs Geothermal Leasing Project. Since 1973, the Idaho Conservation League ("ICL") has worked to protect Idaho's clean water, wilderness, and quality of life. We have a long history of involvement with habitat protection and statewide energy issues. As Idaho's largest statewide conservation organization, we represent over 20,000 supporters who want to ensure that energy development and infrastructure are consistent with natural resource protection.

The Idaho Conservation League supports the development of alternative energy sources, and we find geothermal energy particularly promising. But we must also ensure that new development does not compromise Idaho's quality of life or critical wildlife habitat. The Panther (Big) Creek Hot Springs Project location is a promising geothermal energy site. However, the project area also encompasses sensitive ecological values, opportunities for outdoor recreation, overlaps a portion of the West Panther Creek Inventoried Roadless Area, and abuts the Frank Church-River of No Return Wilderness, the Wild and Scenic Salmon River, and the Wild and Scenic eligible Panther Creek. ICL encourages the USFS to prioritize protecting cultural, ecological, and recreational values in the lease area.

We recognize the Forest Service decision here does not authorize ground-disturbing activities in the lease area. In this decision, the Forest Service is considering whether to concur the area is available for leasing and recommend stipulations and notices that will encumber a lease. We recognize the BLM and Forest Service will review future ground disturbing activities and include site and impact specific restrictions during future development stages. However, the lease stipulation and notices that the Forest Service are considering in this decision establish the basic framework for these later site-specific approvals. In order to ensure adequate protections

for ground distributing activities the Forest Service must ensure the lease stipulations and notices recommended here are robust and comprehensive.

The Forest Service's top priority should be to ensure the lease stipulations and notices direct future ground disturbing activities to previously developed areas, protect habitat for fish, plants, and wildlife, and maintain the values of the abutting protected, and eligible, landscapes and waterways. The second priority should be to ensure the stipulations and notices provide the USFS with sufficient authority and flexibility to ensure future ground disturbing activities avoid, minimize, and then mitigate impacts to these public values. ICL's detailed comments attached to this letter will ensure the Environmental Assessment the Forest Service is developing will meet these priorities.

We look forward to working with the USFS to formulate leasing stipulations and notices that preserve Idaho's natural resources and provide renewable energy services to Idahoans. Please keep us on the list to receive both a hard copy and an electronic copy of all upcoming documents.

Sincerely,

A handwritten signature in black ink, appearing to read "Dani Mazzotta".

Dani Mazzotta
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A handwritten signature in blue ink, appearing to read "John Robison".

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Idaho Conservation League comments on the Panther (Big) Creek Hot Springs Geothermal Leasing Project

General Issues under the National Environmental Protection Act

Priorities: Avoid, Minimize, Mitigate

In terms of priorities, USFS should develop lease stipulations and notices that retain sufficient authority and flexibility to minimize the impact of future ground disturbing activities. For impacts that cannot be avoided the stipulations must ensure sufficient authority and flexibility for the USFS to minimize the impacts through site-specific design, location, and operational controls. After avoiding and minimizing impacts, the stipulations and notices must provide sufficient authority and flexibility to mitigate remaining impacts, first at the location of the impact, and as a last resort through mitigation outside of the impact zone. Before recommending lease stipulations and notices that minimize or mitigate impacts, the EA must disclose and describe why avoiding impacts caused by ground disturbing impacts is not possible. The EA need not consider a fully formed mitigation program, but must indicate whether proposed mitigation actions are sufficiently likely to address the impact.

Potential Changes to Stipulations

The Project Description here describes several stipulations that prohibit ground disturbance in sensitive areas.¹ But many of these stipulations may be altered in three possible ways: (1) waiver, where the stipulation no longer applies across the entire lease area; (2) exception, a one-time site-specific abeyance of the stipulation; and (3) modification, a change to the stipulation.²

Table 1, describing the stipulations notes many are available for any of these three changes and provides some guidelines for considering the changes. ICL comments the EA must identify whether each stipulation is subject to each change individually. For example, the EA should identify whether the stipulation “No Surface Occupancy-Lands having steep slopes” is waivable or only subject to exception. Then after indicating the specific category of change each stipulation is subject too, the EA must analyze the potential impacts of applying the change versus not allowing for the change. If the EA considers these changes in general, then USFS must allow for further public participation before approving any site-specific change to a stipulation adopted in this decision, including any waivers, exceptions or modifications not specifically addressed by this EA.

Cumulative Effects

The EA must consider the cumulative effects of current activities and reasonably foreseeable future activities in the affected area. The affected area includes locations outside the lease area. In delineating the affected area for purposes of the cumulative impacts, the EA must consider that the lease area supports migratory fish and other species that may use the lease area seasonally or during lifecycle of the species. Further, the affected area must include the surrounding roadless, wilderness, and wild and scenic rivers that abut the lease area in order to disclose and consider the impacts to those ecological, recreational and visual resources.

Connected Actions

¹ *Panther (Big) Creek Hot Springs Geothermal Lease Project Description* at Table 1, page 7.

² *Id* at 4 – 5.

A geothermal development is useless without a transmission line to deliver the output to the electrical system. Therefore, the EA must consider the impacts of the transmission line as a connected action. The Project Description claims the USFS is unable to predict the impacts from the transmission line.³ However, the project description does contain a Reasonably Foreseeable Development Scenario in order to disclose and analyze potential surface disturbing activities. This Scenario describes the future geothermal development based on the 2008 Programmatic Geothermal EIS and similar geothermal developments on BLM land.⁴ ICL submits the USFS has at least as much information on potential transmission line locations as it has on the scale of site-specific impacts from the geothermal development. It is reasonably foreseeable the transmission line from the geothermal project will follow the shortest path, balanced by constructability factors, to reach the nearest transmission level line in the area. The EA must consider the impacts of probable transmission line location and construction as part of this analysis. Issues to include in the scope of this analysis include potential impacts to the West Panther Creek Inventoried Roadless Area, the Frank Church-River of No Return Wilderness, the Wild and Scenic Salmon River, and the Wild and Scenic eligible Panther Creek and impacts to listed fish species.

The EA must also disclose and consider off-site impacts from transporting equipment into the lease area, noxious weed controls applied to equipment entering the area, and potential off-site mitigation measures.

Monitoring

The EA must disclose and consider stipulations and notices that provide the USFS with sufficient authority and flexibility to conduct regular site visits to surface disturbing activities to ensure compliance with lease provisions, implementation of mitigation measures and allow for spot inspections without prior notification.

Mitigation Measures

Where avoidance and minimization measures have been exhausted and additional impacts remain, the mitigation of ground disturbing activities is necessary. Mitigation must focus primarily as close as possible to the location of the impact. If necessary, mitigation may also extend to potential off-site locations. The EA should disclose and consider lease stipulations and notices that provide the USFS with sufficient authority and flexibility to require a wide range of mitigation measures before approving ground-disturbing activities.

The EA should disclose and consider a range of potential mitigation measures applicable to future ground disturbing activities. Mitigation may include rehabilitation of areas infested with non-native annual grasses and other invasive species with native plant species, conservation easements on private property, native seed bank funds, and the voluntary retirement of grazing allotments. The USFS should consider decommissioning and rehabilitating low-use, high-risk roads and routes throughout the lease area. If migratory species are being affected, the EA should consider improvements to conservation efforts in other areas. Just as mitigation for salmon affected by dams includes protecting spawning habitat, energy development and transmission projects affecting migratory species could purchase conservation easements in other key habitats. While avoiding and minimizing impacts is the top priority, the USFS should disclose and consider a wide range of potential mitigation options.

³ *Project Description* at 19.

⁴ *Id.*

Effectiveness of Mitigation

Any discussion of mitigation measures must include some indication of the potential effectiveness of the measure. For example, the revegetation plan must include some analysis of the potential to establish viable native plant species that will remain viable on the landscape into the future. It is not sufficient to merely state that reseeding will occur, but that desired vegetation will be established and maintained. The USFS must also ensure stipulations and notices provide sufficient authority and flexibility to monitor and enforce mitigation measures before approving future ground disturbing actions. Mitigation measures must also be durable and be effective for the entire duration of the project impacts.

Use of Funds

Any funds generated for off-site mitigation for wildlife must be accompanied by the stipulation that

these funds are strictly used for the benefit of wildlife, fish, and the environment. Under no circumstance should these funds be available for other purposes. If additional measures are necessary to mitigate for local visual, community, economic or other non-wildlife concerns, funding for this mitigation should come from another source and not the percentage devoted to wildlife mitigation. The EA must disclose and consider lease stipulations and notices that provide the USFS with sufficient authority and flexibility to ensure the effective use of mitigation any funds.

Forest Plan

The BLM and USFS must ensure that all projects are consistent with the Salmon National Forest Land and Resource Management Plan as it relates to surface occupancy for geothermal and mineral leasing activities. Specifically this project must be compatible with Idaho Roadless rule and Wild and Scenic River corridor regulations.

Resource specific issues

Habitat, habitat fragmentation, and migration corridors

The lease area encompasses important habitat for species such as salmon, steelhead, and other anadromous fish. Such habitat has been severely fragmented and reduced through a variety of management practices. Habitat is important for all species and even more so for species listed under the Endangered Species Act and for Management Indicator Species and Forest Service Sensitive Species. The EA must consider whether the stipulations and notices, including any changes, avoid impacts to designated critical habitat, habitat occupied by listed species, and habitat that is suitable but not yet occupied by listed species. Further, the EA must consider how impacts in the lease area may effect migration of species into or through the surrounding habitat. The decision must adopt stipulations and notices that provide the USFS sufficient authority and flexibility to ensure future ground distributing activities protect designated, occupied, and suitable habitat. The Forest Service should also consult with NOAA Fisheries and the US Fish and Wildlife Service as part of this EA.

Roads

One of the greatest concerns we have is the construction of new roads in the lease area. Previous management activities have resulted in extensive road and right-of-way densities throughout our public lands. This density compromises the ability to support wildlife and fish by promoting further human disturbance, fragmenting habitat, accelerating sedimentation,

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spreading noxious weeds, and encouraging Off Road Vehicle use. Furthermore, there is a positive correlation between roads, even temporary ones, and human-caused wildfire ignitions.

New roads for construction and maintenance of geothermal development will provide more access for motorized recreation in areas without a current road system and more opportunities for illegal off-road riding. The devastating impacts of Off Road Vehicles (ORVs) on terrestrial ecosystems are well established. Irresponsible ORV users degrade water quality, spread noxious weeds, fragment habitat, disturb wildlife, increase fires, and displace non-motorized recreationists. The EA must analyze the impacts of ORV use accompanying new geothermal development, and the stipulations and notices must provide the USFS sufficient authority and flexibility to monitor and control ORV use triggered by site-specific activities.

Also as part of the EA, we recommend the USFS evaluate the current road network in the lease area and close or decommission unneeded roads and corridors as an integral part of reducing the impacts of future site-specific activities.

Noxious Weeds

The most cost-effective way to deal with noxious weeds is to protect strongholds of native vegetation from activities that spread noxious weeds directly or create suitable habitat by removing native vegetation and disturbing the soil. Special care should be taken to safeguard ecologically intact areas that are not currently infested. The USFS should ensure lease stipulations and notices provide sufficient authority and flexibility to constrain future ground disturbing activities to limit road use and the exposure of mineral soils where weeds may become established. Also, the stipulations and notices must retain sufficient authority and flexibility to require washing of access vehicles and equipment prior to site access to dislodge noxious weeds.

The EA must analyze the potential for degradation of existing native vegetation and the potential for increased noxious weeds in the lease area. Also, the EA must consider, and the stipulations and notices must provide, a robust method for reducing the danger of noxious weed spread through equipment washing prior to entering the lease locations. As a connected action, the impacts of noxious weed control through off-site equipment washing must be considered in the EA. The agencies should also analyze the effects of regular weed control activities in previously undisturbed areas. For example, weed treatments may affect non-target species and vehicle access may increase fire hazard and soil disturbance.

Water Quality

We are concerned that geothermal exploration and development could adversely affect water quality through development within and adjacent to streambeds, as well as increased sedimentation from upland disturbance. We are also concerned that water discharges associated with operation of certain types of geothermal development could degrade ground or surface water quality. Even though chemical use may be limited, we note the stipulations do not appear to restrict the use or location of fuel and other chemicals. We are particularly concerned with regard to the transportation of fuel needed for any exploration and development activities and ask that the Forest Service develop a fuel transportation plan to minimize potential spills and implement clean up responses immediately in the event of a spill.

To protect water quality and aquatic habitat the EA must disclose all foreseeable impacts to water quality during all stages of future development as part of the Reasonably Foreseeable

Development Scenario. The EA must analyze how the stipulations and notices provide sufficient authority and flexibility for the USFS to protect water quality during review and approval of ground disturbing activities. Also, the EA must disclose and evaluate standards for fuel and chemical transportation and storage, spill avoidance and clean up plans, and site-specific actions to avoid and minimize the mobilization of sediment. In addition, the stipulations and notices must ensure the operator will comply with all applicable federal and state water quality laws and regulations, including sections 303, 401, and 404 of the Clean Water Act.

ICL also submits these specific standards for the USFS to adopt: All fuel and chemical storage should be greater than 500' from riparian and wetland areas, just as the stipulation "CSU-Earthworks" prohibits roads and well pads within 500' of riparian and wetland areas.⁵ Spill clean up materials, fire-fighting equipment, and a spill response plan must be kept in all vehicles. An oil-absorbent boom should be strategically placed so it can be quickly deployed in the event of a transportation accident. Heavy equipment should be inspected for oil and hydraulic fuel leaks prior to operation and during operations.

Increased Fire Hazard

The EA must consider the potential for increased risk of human-caused fire during all stages of future development as part of the Reasonably Foreseeable Development Scenario. Further, the EA must disclose and consider stipulations and notices that provide sufficient authority and flexibility for the USFS to reduce the risk of fire from future site-specific activities. We also recommend the EA disclose and consider standards for an evacuation plan and identifying potential safe zones for future ground distributing activities.

Greater Sage-Grouse and other species

Although this area may not provide sage-grouse habitat, many of the design features to minimize impacts to sage-grouse may also help reduce disturbance to other species. The Sage-Grouse Monograph, published in late 2009 contains further site-specific and species-specific information for making leasing siting decisions, creating leasing stipulations, and determining mitigation needs.

Sensitive and ESA listed plants

The EA must disclose and consider potential impacts to sensitive and ESA listed plant species in the lease area. Also, the EA must consider, and the USFS should adopt, stipulations and notices that provide sufficient authority and flexibility to address impacts from future ground disturbing activities.

West Panther Creek Ridge Idaho Roadless Area

A corner of the Panther Creek Geothermal project appears to overlap with designated West Panther Creek Inventoried Roadless areas. While these areas are categorized as "general forest" under the rule, under the Idaho Roadless Rule, General Forests IRA's prohibit new road development for geothermal development. Below is language from the Idaho Roadless Rule as it relates to geothermal development:

(e) *General Forest, Rangeland, and Grassland.* (1) For mineral leases, contracts, permits, and other associated activities authorized after October 16, 2008, the Forest Service will not recommend, authorize, or consent to road construction or reconstruction associated with mineral leases in Idaho Roadless Areas

⁵ *Project Description*, Table 1, page 8.

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designated as General Forest, Rangeland, and Grassland theme; except such road construction or reconstruction may be authorized by the responsible official in association with phosphate deposits as described in Figure 3-20 in section 3.15 Minerals and Energy in the Roadless Area Conservation; National Forest System Lands in Idaho Final Environmental Impact Statement. Surface use or occupancy without road construction or reconstruction is permissible for all mineral leasing unless prohibited in the land management plan components.

In the response to comments, there is further explanation as well.

Comment: Energy resources. Several respondents suggested that the rule should not include an exemption for oil and gas or geothermal development as there is currently no known potential for their development. These respondents further asserted that future energy exploration should be dealt with under the proposed change clause, and that there are sufficient places outside roadless areas where alternative energy sources like wind, biomass, and geothermal can be developed.

Response: As identified in the FEIS, there is low potential for oil and gas development in Idaho but there is some potential for geothermal energy. Wind energy is more developed in southern Idaho and there appears to be ample opportunities for expansion outside roadless areas. The Western Energy Corridor study was also considered during development of this rule and no corridors have been identified in IRAs. There is currently one geothermal facility in Idaho generating electricity. Because the development of this resource is in its infancy and would be widely available on private and the roaded portion of NFS lands, the Department has determined there is not a need to allow roads for developing geothermal energy in IRAs at this time. If the State or other parties believe new information or circumstances warrant an adjustment, a change of the rule's restrictions can be sought and considered through the rule's modification process. For now, the final rule prohibits new road construction or reconstruction within any theme for post-rule oil and gas, and geothermal leasing. Surface use and occupancy would still be permitted in the BCR and GFRG themes so long as the LMP components do not expressly prohibit such activities.